No. 7900035

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Speight Seed Farms, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS REQUIRED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOBACCO

'Speight G-70'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 14th day of June in the year of our Lord one thousand nine hundred and seventy-nine

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
Speight G-70	Speight G-70	PV NUMBER 7900035
2. KIND NAME: Flue Cured Tobacco	3. GENUS AND SPECIES NAME: Nicotiana-Tobacum	FILING DATE 1-3-79 / TIME 10:00 A.M. P.M.
4. FAMILY NAME (BOTANICAL): Solanaceal Night Shade	5. DATE OF DETERMINATION: December 1978 (75) 1/8/79	FEE RECEIVED $ 500.00 $ 250.00 / DATE 1-3-79 5-16-79

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Speight Seed Farms, Inc.	RFD 1 Box 507 Winterville, NC 28590	919 756-0718

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	North Carolina	1-1-1972

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:
M. L. Grimsley
Speight Seed Farms, Inc.
Winterville, NC 28590

13. **CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:**

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
[X] YES [ ] NO	[X] FOUNDATION [X] REGISTERED [X] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

12-20-78
(DATE)

Mark L. Grimsley - Breeder
(SIGNATURE OF APPLICANT)

12-20-78
(DATE)

Rachel Speight Snyder
(SIGNATURE OF APPLICANT)

FORM GR-470 (1-78)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $500 fee ($250 filing fee and $250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

CHARLES L. DAVIS L. C. SPEIGHT RACHEL SPEIGHT

SPEIGHT SEED FARMS, INC.

BREEDERS, REGISTERED AND CERTIFIED SEED
TOBACCO SEED – SOYBEANS – HYBRID CORN
BOX 507 ● PHONE (919) 756-0718
WINTERVILLE, N. C. 28590

7900035

13-A December 18, 1978

Exhibit A

Origin And Breeding History Of The Variety

Name: SPEIGHT G-70
Pedigree: Coker 258 x Va 115 x Speight G-10

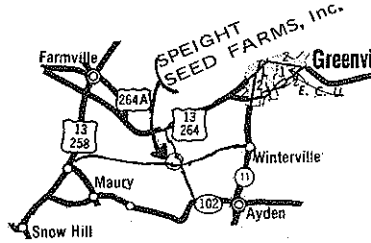
1. In July, 1964, a cross was made between Va 115 and Speight G-10. Results of this cross was named or numbered G-16. After five years of individual plant selections from our disease nurseries, G-16 was found to be very highly resistant to Black Shank.

2. In the summer of 1969, Coker 258 was crossed on G-16 (C258 x G-16). Results of this cross was named or numbered N-61. Individual plant selections were made from N-61 through the sixth generation. The name of number N-61, was then changed to the variety name of Speight G-70.

3. Two variants were found during this five year period. One a stringy and narrow type, the other a very broad tall type with large fan shaped leaves. The type selected as N-61 was most like NC 2326. No variants were found in N-61 after the fourth generation.

4. Speight G-70 became stable in the fifth generation. It was tested in the NC Official Variety Test, by Speight Seed Farms and by farmers before entering the Regional Evaluation Program, G-70 remained stable throughout these tests.

KNOWN ORIGIN QUALITY SPEIGHT'S SEEDS ADAPTABILITY



GOOD SEED OF AN ADAPTED VARIETY IS THE FOUNDATION OF A GOOD CROP

CHARLES L. DAVIS L. C. SPEIGHT RACHEL SPEIGHT

SPEIGHT SEED FARMS, INC.

BREEDERS, REGISTERED AND CERTIFIED SEED

TOBACCO SEED – SOYBEANS – HYBRID CORN

BOX 507 ● PHONE (919) 756-0718

WINTERVILLE, N. C. 28590

7900035

13-B

December 18, 1978

Novelty Statement

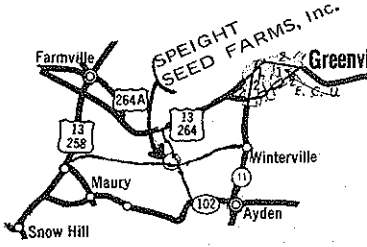
Name: Speight G-70-----Flue Cured Tobacco
Pediree: C-258 x Va 115 x Speight G-10

Speight G-70 most closely resembles NC 2326, but differs by growing shorter (38.5 vs. 41.1 inches) in height. It has a higher leaf count (19.0 vs 18.4) leaves per plant; leaf sizes and shapes are about the same. Internodes average shorter (2.4 vs 2.6 inches); Ground suckers counts are higher (0.7 vs 0.2). G-70 flowers three or four days later (64 vs 60 days) and flower heads are more closed (intermediate vs open). G-70 is resistant to Root Knot Nemotode---NC 2326 is susceptible. G-70 normally yields about 500 pounds per acre more and standibility is better-due to bigger and stronger root system.

Information in 1977 and 1978 Flu-Cured Tobacco
Variety Evaluation Report

Disease Data From Regional Small Plot Test 1977 and 1978

Entry or No.	B.S. Index	Root Knot	B. Wilt Index	B. Spot Tolerance
NC 95	31.2	Res.	29.3	Tolerant
NC 2326	33.5	Sus.	53.0	Mod. Tolerant
Speight G-70	19.0	Res.	40.1	Mod. Tolerant



GOOD SEED OF AN ADAPTED VARIETY IS THE FOUNDATION OF A GOOD CROP

INFORMATION FOR EXHIBIT-C ON Speight G-70

1977

Table 1. (Continued)
Whiteville, Kinston, Oxford, Blackstone, Tifton and Florence - 1977

Entry	Sol. Sug. %	Tot. Nit. %	Ins. Nit. %	Alpha Amino N. %	Plant Height Inches	Leaf Number	Days to Flower
NC 2326	11.3	2.67	1.08	.32	41.1	18.4	60
NC 95	11.1	2.76	1.14	.32	40.4	19.0	63
3	11.1	2.71	1.16	.31	37.1	18.6	66
4	11.2	2.66	.92-	.30	38.2	18.5	64
5	11.3	2.59	1.13	.31	40.0	20.2	63
6	9.8	2.87	1.12	.34	45.2	19.0	62
7	10.8	2.68	1.10	.29	41.6	20.5	67
8	10.5	2.79	1.16	.32	42.1	20.7	68
9	11.8	2.69	1.08	.33	38.9	17.9	63
10	10.7	2.89	1.17	.34	43.1	18.4	63
11	11.9	2.51	1.06	.26	40.9	21.7	71
12	11.1	2.68	1.14	.31	43.7	18.9	61
13	11.9	2.59	1.09	.30	43.6	18.9	65
14	11.0	2.74	1.16	.31	45.5	20.2	65
15	11.5	2.77	1.13	.32	39.0	18.8	59
16	11.2	2.74	1.17	.34	42.1	19.9	64
17	10.8	2.78	1.26+	.31	42.1	22.1	70

TURN TO NEXT PAGE - PLOT 30 = Speight G-70

Table (Continued)
Whiteville, Kinston, Oxford, Blackstone, Tifton and Florence - 1977

Entry	Sol. Sug. %	Tot. Nit. %	Ins. Nit. %	Alpha Amino N. %	Plant Height Inches	Leaf Number	Days to Flower
18	11.0	2.70	1.18	.32	42.8	22.4	71
19	11.4	2.64	1.07	.27	42.0	20.2	63
20	10.9	2.60	1.13	.30	39.9	20.9	65
21	10.8	2.69	1.13	.32	41.0	19.8	62
22	10.8	2.82	1.14	.35	39.9	19.0	61
23	10.5	2.60	1.17	.35	41.1	21.9	67
24	10.8	2.71	1.14	.30	41.6	20.9	66
25	10.5	2.92	1.25+	.31	45.1	19.6	65
26	11.4	2.54	1.09	.31	42.3	19.6	65
27	9.8	2.88	1.18	.30	42.2	21.7	70
28	9.8	2.88	1.23+	.39+	40.5	18.7	60
29	10.5	2.66	1.14	.32	36.2	20.3	61
30 G-90	11.7	2.60	1.12	.31	38.5	19.0	64
31	11.6	2.40-	1.04	.28	44.9	22.6	68
32	9.5-	2.91	1.23+	.35	40.3	20.5	63
33	11.6	2.67	1.17	.32	44.0	19.6	67

FORM GR-470-31
(12-16-74)

13-C
Exhibit-C

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

OBJECTIVE DESCRIPTION OF VARIETY

Tobacco (Nicotiana tabacum)

NAME OF APPLICANT(S)
Speight Seed Farms, Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)
RFD 1 Box 507
Winterville, NC 28590

VARIETY NAME OR TEMPORARY DESIGNATION
Speight G-70

FOR OFFICIAL USE ONLY
PVPO NUMBER
7900035

Place the appropriate number that describes the varietal character in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9] when number is either 99 or less or 9 or less.

1. CLASS:

[1] 1 = FLUE-CURED 2 = FIRE-CURED 3 = AIR-CURED 4 = CIGAR FILLER 5 = CIGAR BINDER 6 = CIGAR WRAPPER
7 = MISCELLANEOUS-DOMESTIC 8 = FOREIGN-CIGAR LEAF 9 = FOREIGN-NON-CIGAR LEAF

[ ] AIR-CURED: 1 = BURLEY 2 = MARYLAND 3 = DARK AIR-CURED

STANDARD VARIETIES

01 = NC 95	02 = NC 2326	03 = COKER 319	04 = HICKS	05 = SPEIGHT G-28	06 = SC 58
07 = Ky 151	08 = BURLEY 21	09 = BURLEY 49	10 = Ky 10	11 = MARYLAND 609	12 = Ky 165
13 = Pennbel 69	14 = HAVANA 503	15 = FLORIDA 17	16 = OTHER		

2. MATURITY (Transplant to 50% plants 1 Fl.) (Select code from Standard Varieties listed above)

[0][6][4] NO. OF DAYS
[ ] DAYS EARLIER THAN . . . [ ]
[0][4] DAYS LATER THAN . . . . . [0][2]

3. SEEDING TO TRANSPLANTING (Select code from Standard Varieties listed above)

[7][8] NO. OF DAYS
[ ] DAYS EARLIER THAN . . . [ ]
[0][3] DAYS LATER THAN . . . . . [0][2]

4. PLANT HEIGHT (After topping) (Select code from Standard Varieties listed above)

[0][9][8] CM TALL
[0][7] CM SHORTER THAN . . . . . [0][2]
[ ] CM TALLER THAN . . . . . [ ]

5. LEAF SIZE (At leaf maturity) (Select code from Standard Varieties listed above)

LENGTH

[5][8][7] CM 5TH LEAF
[0][9] CM SHORTER THAN . . . . . [0][2]
[ ] CM LONGER THAN . . . . . [ ]

[6][8][3] CM 10TH LEAF
[ ] CM SHORTER THAN . . . . [ ]
[2][8] CM LONGER THAN . . . . . [0][2]

[6][1][7] CM 15TH LEAF
[ ] CM SHORTER THAN . . [ ]
[2][3] CM LONGER THAN . . . [0][2]

WIDTH

[2][1][1] CM 5TH LEAF
[0][5] CM NARROWER THAN . . . [0][2]
[ ] CM WIDER THAN . . . . . [ ]

[2][7][7] CM 10TH LEAF
[1][5] CM NARROWER THAN . . . [ ]
[ ] CM WIDER THAN . . . . . [ ]

[3][2][8] CM 15TH LEAF
[ ] CM NARROWER THAN [ ]
[2][5] CM WIDER THAN . . . . [0][2]

6. LEAF YIELD (Select code from Standard Varieties listed above)

[3][3][7][2] KG/HA
[ ] % LESS THAN . . . . . [ ]
[1][6] % MORE THAN . . . . . [0][2]

7900035

GROUPING: STANDARD VARIETIES

01 = NC 95 | 02 = NC 2326 | 03 = COKER 319 | 04 = HICKS | 05 = SPEIGHT G-28 | 06 = SC 58

07 = Ky 151 | 08 = BURLEY 21 | 09 = BURLEY 49 | 10 = Ky 10 | 11 = MARYLAND 609 | 12 = Ky 165

13 = Pennbel 69 | 14 = HAVANA 503 | 15 = FLORIDA 17 | 16 = OTHER _____

7. LEAF NUMBER (Select code from Standard Varieties listed above)

TOPPED NORMAL:

[1 9 0] NO. PER PLANT

[1 9 0] NO. OF LEAVES > 40.6 CM

[0 9 8] CM HEIGHT OF LAST LEAF > 40.6 CM

NOT TOPPED:

[2 4 0] NO. OF LEAVES OR NODES TO "CROWFOOD" FROM 1ST HARVESTABLE LEAF

8. INTERNODES (Topped) (Select code from Standard Varieties listed above)

[6 1] MM LENGTH [0 5] MM SHORTER THAN ..... [0 2] [ ] MM LONGER THAN, ... [ ]

9. LEAF CHARACTERISTICS:

PETIOLE ANGLE:

[3 5] DEGREES [1] GROUPING: 1 = < 35° 2 = 35–45° 3 = 46–65° 4 = > 65°

LEAF CARRIAGE

[2] 1 = ARCHED (DROOPING) 2 = HORIZONTAL 3 = UPRIGHT

LEAF COLOR (At topping or when 50% of plants with 1 flower)

[3] 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = YELLOW–GREEN 5 = YELLOW

LEAF SHAPE:

[3] 1 = BROADER THAN LONG 2 = LENGTH EQUALS WIDTH 3 = LONGER THAN BROAD

[1] 1 = BROADEST AT MIDDLE 2 = BELOW MIDDLE 3 = ABOVE MIDDLE

TIP SHAPE

[2] 1 = ACUTE 2 = ACUMINATE 3 = OBTUSE

VENATION PATTERN:

[2] 1 = SQUARE 2 = ANGULAR

LEAF SURFACE

[1] 1 = SMOOTH (HICKS) 2 = PUCKERED (NC 95)

LEAF MARGIN

[2] 1 = WAVY 2 = NOT WAVY [2] 1 = RECURVED 2 = NOT RECURVED

10. FLOWERS:

[2] COLOR: 1 = WHITE 2 = PINK 3 = RED 4 = OTHER _____

FLOWER HEAD HABIT:

[2] 1 = CLOSED (NC 95) 2 = INTERMEDIATE 3 = OPEN (HICKS)

11. PLANT FORM

[2] 1 = PYRAMIDAL 2 = COLUMNAR 3 = OTHER (Specify) _____

12. GROUND SUCKERS:

[0 7] NO. PER PLANT

13. DISEASE (0 = Not tested, 1 = Susceptible, 2 = Resistant)

[2] BLACK SHANK (RACES) _____

[2] BLACK ROOT ROT

[0] BLUE MOLD

[0] WILDFIRE (SPECIES) _____

[0] BLACKFIRE

[2] FUSARIUM WILT (NICOTIANA)

[0] FUSARIUM WILT (BATATAS)

[0] FROGEYE

[2] BROWN SPOT Tolerance

[2] BACTERIAL WILT

SPEIGHT G-70

13. DISEASE (0 = Not tested, 1 = Susceptible, 2 = Resistant)

1	POTATO VIRUS Y	1	TMV
0	NEMATODE ROOT ROT (LESION, SPECIES)_____	2	ROOT KNOT NEMATODE
0	TOBACCO ETCH VIRUS	1	OZONE AIR POLLUTION
	OTHER (Specify) _____		OTHER (Specify) _____

7900035

NOTE: Under 16 "Comments", give comparative reaction with a standard variety appropriate for each disease tested and indicate if disease reaction of the variety exceeds, equals or is less than that of the standard).

14. LEAF CONSTITUENTS (Give data for described and standard variety):

VARIETY	NICOTINE %	NOR NICOTINE %	TOTAL NITROGEN %	REDUCING SUGARS % (FLUE-CURED)
SUBMITTED	3.56	2.3	2.60	11.70
STANDARD	3.80	2.7	2.67	11.30
NAME OF STANDARD VARIETY	NC 2326	NC 2326	nc 2326	NC 2326

15. VARIETIES MOST CLOSELY RESEMBLING THAT DESCRIBED FOR THE CHARACTERS GIVEN:

CHARACTER	VARIETY	CHARACTER	VARIETY
MATURITY	Coker 319	LEAF TIP SHAPE	NC 2326
LEAF LENGTH	NC 2326	VENATION PATTERN	NC 2326
LEAF WIDTH	NC 2326	LEAF SURFACE	NC 2326
LEAF CARRIAGE	NC 2326	LEAF MARGIN	NC 2326
PETIOLE ANGLE	NC 95	LEAF COLOR	NC 2326
LEAF SHAPE	NC 2326	PLANT FORM	NC 95

16. COMMENTS (For increasing accuracy of description)

Speight G-70 most closely resembles NC 2326 but differs by growing shorter (38.5 vs 41.1 inches) with higher leaf counts (19.0 vs 18.4) leaves per plant. Leaf size and shapes are abouth the same as NC 2326. Internodes average shorter (2.4 vs 2.6 inches). General sucker counts are higher (0.7 vs 0.2). G-70 flowers about three or four days later (64 vs 60 days) from transplanted date. G-70 carries Root Knot nemotode resistance and NC 2326 is susceptible. Flower heads are more closed; intermediate, for G-70 and open for NC 2326.

Disease Data From Reg. Small Plot Test And NC Off. Var. Test 1978

Entry	B. S. Index	Bac. Wilt Index	R. Kn. Nem.	Brown Spot Tolerance
NC 2326	33.5	53.0	Sus.	Mod. Tolerant
NC 95	31.2	29.3	Res.	Tolerant
G- 70	19.0	40.1	Res.	Mod. Tolerant

CHARLES L. DAVIS L. C. SPEIGHT RACHEL SPEIGHT

SPEIGHT SEED FARMS, INC.

BREEDERS, REGISTERED AND CERTIFIED SEED

TOBACCO SEED – SOYBEANS – HYBRID CORN

BOX 507 ● PHONE (919) 756-0718

WINTERVILLE, N. C. 28590

7900035

13-D December 18, 1978

Exhibit D

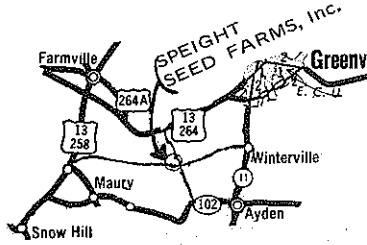
Speight G-70 Flue Cured Tobacco

Speight G-70 flowers four days later than NC 2326 but is similar in many ways. G-70 starts off growing flatter and wider, it closes in the middle faster. NC 2326 seems to grow more erect and fills the middle later. Both grow with dark green color. G-70 normally produces about one more leaf per plant. It grows a larger and stronger root system; standibility and storm resistance are better. The topped out height of G-70 is usually one or two inches shorter. Tops differ by being more closed on G-70, intermediate vs open, with three inches more distance between crows foot and top leaf on NC 2326. Leaves are closer spaced especially in the top part of the plants. They are smooth and hang parallel on both varieties. Expect a few more ground suckers on G-70 with less leaf axil suckers. G-70 normally yields 500 pounds per acre more than NC 2326. Color of cured leaf is about the same with, G-70 producing a higher percentage of medium to heavy bodied, and less chaffy leaf. Nicotine content is usually lower. G-70 carries very high resistance to Root Knot Nemotode. NC 2326 carries moderate resistance to Black Shank, low to Bacterial Wilt and no resistance to Root Knot Nemotodes.

1978 Comparison in Regional Small Plot & Regional Farm Test

Entry or No.	Yield lbs/A	Value $/A	Index $ CWT	Nic.%	R. Kn. Res.
NC 2326	2808	$3840	$136.52	3.09	Sus.
NC 95	2684	$3524	$131.36	3.32	Res.
Speight G-70	3256	$4414	$134.98	2.76	Res.

Inf. in Flue Cured Tobacco Evaluation Committee Report 1977-1978




SPEIGHT
G-70